

SUPPORTING STATEMENT  
FOR  
10 CFR PARTS 72 and 150  
INTERIM STORAGE FOR GREATER THAN CLASS C WASTE  
PROPOSED RULE  
(3150-0132)

DESCRIPTION OF THE INFORMATION COLLECTION

NRC regulations in 10 CFR Part 72 establish requirements, procedures, and criteria for the issuance of licenses to receive, transfer, and possess power reactor spent fuel and other radioactive materials associated with spent fuel storage, at an independent spent fuel storage installation (ISFSI). The regulations also establish requirements, procedures and criteria for the issuance of licenses to the Department of Energy (DOE) to receive, transfer, package, and possess power reactor spent fuel, high-level radioactive waste (HLW), and other radioactive materials associated with spent fuel and HLW storage, in a monitored retrievable storage (MRS) installation. This proposed rulemaking would add the ability for licensees to request a specific license to allow the interim storage of reactor-related waste classified for disposal under 10 CFR Part 61 as greater than class C (GTCC) within an ISFSI or MRS to 10 CFR Part 72. The requested information will be used by the NRC staff in the licensing process to review applications requesting storage of GTCC waste within an ISFSI or MRS. This rulemaking does not preclude licensees from licensing the storage of GTCC waste under the existing provisions of 10 CFR Parts 30 and/or 70. However, the NRC believes that allowing storage under 10 CFR Part 72 would simplify the licensing process (e.g., all storage could be under one license instead of multiple licenses) and reduce the potential burden on licensees, the NRC, and Agreement States with no adverse affect on public health and safety, or the environment. The revised estimate of burden reflects the time necessary for licensees to amend their application requests to include GTCC waste for storage of spent fuel in an ISFSI under 10 CFR Part 72.

A. JUSTIFICATION

1. Need for and Practical Utility of the Information Collection

In order to obtain a specific license under 10 CFR Part 72 to co-locate reactor-related GTCC waste within an ISFSI or MRS, an applicant must submit a Safety Analysis Report (SAR). The SAR would describe how the GTCC waste would be stored. The SAR would describe how structures, systems, and components that are important to safety are designed to allow the storage of GTCC waste within an ISFSI or MRS. The applicant shall ensure that the co-location of this radioactive material does not have an adverse affect on either the safe storage of spent fuel or the operation of the ISFSI. Based on an acceptable review of the SAR, the NRC would issue a 10 CFR Part 72 specific license to allow the storage of GTCC waste. Current 10 CFR Part 72 specific license holders would be required to submit an amendment to their existing 10 CFR Part 72 license providing the required additional information, if they desire to store GTCC waste at their ISFSI.

The following information collections add reactor-related GTCC waste to the universe of respondents.

Section 72.16 specifies the place for filing an application for an NRC license under 10 CFR Part 72, requires that the application be made under oath, and specifies the documents and number of copies required to be submitted with an application.

The information submitted in the application pursuant to this section and other sections described below is reviewed by various NRC organizational units to assess the adequacy of the applicant's organization, training, experience, procedures and plans for protection of the public health and safety, common defense and security, and the environment. The NRC review and the findings derived therefrom form the basis for NRC decisions concerning the issuance, modification, or revocation of licenses to receive, transfer, and possess power reactor spent fuel, HLW, or reactor-related GTCC waste.

Section 72.22(e)(3) requires the applicant to provide information about its identity, its financial qualifications, the construction and operation costs of an ISFSI or MRS, and its shutdown and decommissioning costs before licensing to carry out the removal of spent fuel and high-radioactive waste from storage. This information will be reviewed by NRC licensing personnel to determine whether the applicant will be able to provide an adequate level of financial responsibility to avoid adverse consequences to public health and safety.

Section 72.24(i) requires the submission of a Safety Analysis Report to allow a safety assessment of the design and operation of the ISFSI or MRS. The SAR would describe how the GTCC waste would be stored. The SAR would describe how structures, systems, and components that are important to safety are properly designed to allow the storage of GTCC waste within an ISFSI or MRS. The information will be reviewed by the NRC licensing staff to determine whether there is reasonable assurance that the activities to be conducted under the license can be performed without endangering the health and safety of the public and that they will be conducted in compliance with the regulations.

Section 72.24(r) requires a description of the compatibility and suitability of the reactor-related GTCC waste with the ISFSI or MRS. This information will be reviewed by the NRC licensing staff to determine whether there is reasonable assurance that the activities to be conducted under the license can be performed without endangering the health and safety of the public and that they will be conducted in compliance with the regulations.

Section 72.28(d) requires the inclusion of the applicant's technical qualifications and a commitment by the applicant to have and maintain an adequate complement of trained and certified installation personnel prior to the receipt of spent fuel, high-level radioactive waste, and/or reactor-related GTCC waste for storage. The information submitted will be reviewed by the NRC licensing staff to determine whether the applicant's technical qualifications, training and organization will be adequate for safe operation of the facility.

Section 72.30(a) requires the inclusion of a decommissioning plan with sufficient information for the decontamination of site and facilities and for disposal of residual radioactive materials after all spent fuel high-level radioactive waste, and reactor-related GTCC waste have been removed. The information submitted will be reviewed by the NRC licensing staff to determine whether the activities conducted under the license can be performed without endangering the health and safety of the public.

Section 72.44(b)(4) requires that an NRC-approved personnel training and certification program be in effect prior to receipt of spent fuel and/or GTCC waste for storage at an ISFSI or MRS. The information submitted will be reviewed by the licensing staff to determine whether the training and certification program is adequate to assure protection of the public health and safety.

Section 72.44(d) requires that each license include technical specifications, which are submitted by the applicant, stating the limits on the release of radioactive materials for compliance with limits of 10 CFR Part 20 and the "as low as reasonably achievable" objectives for effluents.

The information submitted pursuant to these technical specification requirements is reviewed by the NRC staff to determine whether the technical specifications provide an adequate margin of protection for public health and safety and the environment, and to ascertain whether licensee operations are consistent with the commitments made in the application and technical specifications. The technical specifications and reports provide a structured basis for assessing the effectiveness of regulation for releases of radioactive material from an ISFSI or MRS to unrestricted areas by engineering design features and administrative controls.

Section 72.52(c) requires that a creditor apply for the transfer of the license covering spent fuel and/or reactor-related GTCC waste under 72.50(b). The Commission will act upon the application under section 72.50(c). The requirement allows the Commission to determine whether to transfer a license to creditor.

Section 72.72(a) requires that the licensee keep records showing the receipt, inventory (including location), disposal, acquisition, and transfer of all spent fuel, HLW, and GTCC waste in storage. The records must include as a minimum the shipper of the material to the ISFSI or MRS, the quantity of material per item, item identification and seal number, storage location, onsite movements of each storage canister, and ultimate disposal. The records must be retained for as long as the material is stored and for five years after it is transferred or removed from the ISFSI.

Section 72.72(b) requires that each licensee conduct an annual physical inventory of spent fuel, HLW, and GTCC waste in storage. A copy of the current inventory must be retained as a record until the Commission terminates the license.

Section 72.72(d) requires that records of spent fuel, HLW, and GTCC waste in storage be kept in duplicate at separate sites to ensure that a single event cannot destroy both sets of records. Records of material transferred out of the facility must be preserved for five years after the date of transfer.

The material control and accounting procedures are used by the licensee to carry out its material control and accounting operations and are reviewed by NRC inspectors to ensure the adequacy of the licensee's programs and compliance with NRC regulations. The records are reviewed by the inspection staff to detect diversion of material and to initiate prompt action in the event of a diversion.

Section 72.75(b)(2), (3), and (6) require that the licensee notify NRC as soon as possible but not later than 4 hours after the discovery of any of the following events or conditions involving spent fuel, HLW, or GTCC waste; (2) a defect in any storage structure, system, or component which is important to safety; (3) a significant reduction in the effectiveness of any storage confinement

system during use; and (6) an unplanned fire or explosion damaging any spent fuel, HLW, and/or GTCC waste or any device, container, or equipment containing spent fuel, HLW, or GTCC waste when the damage affects the integrity of the material or its container. The information will be used by NRC to determine whether immediate response or corrective action is needed to protect public health and safety.

Section 72.75(c) requires that the licensee notify NRC within 24 hours after the discovery of an event involving unplanned contamination or safety equipment failures. The information will be used by NRC to determine whether immediate response or corrective action is needed to protect public health and safety.

Section 72.75(d)(1)(iv) requires the licensee to make reports required by Sections 72.75(a), (b), and (c) by telephone to the NRC Operations Center. The information must include the quantities and chemical forms involved, and any personnel radiation exposure data. NRC needs this information to determine appropriate actions to protect the public health and safety.

Section 72.75(d)(2)(iv)(L) requires each licensee who makes an initial report required by Sections 72.75(a) or (b) to submit a written follow up report within 30 days of the initial report. Written reports prepared pursuant to other regulations may also be submitted to fulfill this requirement if they contain the necessary information. These reports should also include the type of personnel involved (e.g., contractor personnel, utility-licensed operator, utility non-licensed operator, other utility personnel) and the quantities and chemical and physical forms of the spent fuel, HLW, or reactor-related GTCC waste involved. NRC needs this information to determine whether additional measures are necessary to protect the public health and safety and to determine whether patterns exist that might include poor design, fabrication, or operation requiring corrective action.

Section 72.76(a) requires semiannual submittal of Material Status reports on DOE/NRC Form 742, providing information concerning the special nuclear material contained in spent fuel and GTCC waste possessed, received, transferred, disposed of, or lost by the licensee. Licensees subject to the requirements of 10 CFR Part 75 would report as provided in that part instead of 10 CFR Part 72. The information is required in order for the United States to fulfill its responsibilities as a participant in the US/IAEA Safeguards Agreement and to satisfy bilateral agreements with Australia and Canada and to fulfill its domestic safeguards responsibilities. The use of DOE/NRC Form 742 has been previously approved by OMB under clearance number 3150-0004.

Section 72.78(a) requires that whenever a licensee transfers or receives spent fuel, the licensee must complete and distribute a Nuclear Material Transaction Report on DOE/NRC Form 741. Licensees subject to the requirements of 10 CFR Part 75 would report as provided in that part instead of 10 CFR Part 72. The information is needed in order for the NRC regulatory staff to track the movement and possession of special nuclear material (SNM), generate inventory data, and detect the loss or diversion of material and implement action in the event of such loss or diversion. In rare cases where GTCC waste contains enough SNM, the licensee would also need to complete DOE/NRC Form 741. The use of DOE/NRC Form 741 has been previously approved by OMB under clearance number 3150-0003.

The information submitted in DOE/NRC Forms 741 and 742 (above) is placed in the automated Nuclear Materials Management and Safeguards System (NMMSS) which is maintained through a joint contract by NRC and the Department of Energy (DOE). Common reporting forms are used to

minimize the reporting burden on industry members required to provide nuclear material data to one or both agencies in accordance with prevailing regulations or contractual obligations. The licensee is thus able to file one report to meet the requirements of both agencies. Compliance with specific reporting requirements is monitored by the agency for which the specific data is required.

Section 72.80(g) requires that each specific licensee shall notify the Commission of its readiness to begin operation at least 90 days prior to first storage of spent fuel, high-level waste, or reactor-related GTCC waste in an ISFSI or MRS.

Section 72.108 requires that the licensee evaluate the facility with respect to potential environmental impacts of transporting spent fuel, HLW, or GTCC waste into the region.

Section 72.120(a) requires the application to include the design criteria for the proposed storage installation. These design criteria establish the design, fabrication, construction, testing, and performance requirements for structures, systems, and components important to safety.

Section 72.140(c)(2) specifies licensee responsibility for establishing a QA program. Prior to receipt of spent fuel and/or GTCC waste at the ISFSI or spent fuel, HLW, and/or GTCC waste at the MRS, the licensee shall file a description of its QA program with NRC and obtain NRC approval. The licensee must also notify NRC of its intent to use a previously approved QA program.

## 2. Agency Use of Information

In order to obtain a specific license under 10 CFR Part 72 to co-locate reactor-related GTCC waste within an ISFSI or MRS, an applicant must submit a Safety Analysis Report (SAR). The SAR would describe how the GTCC waste would be stored. The SAR would describe how structures, systems, and components that are important to safety are designed to allow the storage of GTCC waste within an ISFSI or MRS. The applicant shall ensure that the co-location of this radioactive material does not have an adverse affect on either the safe storage of spent fuel or the operation of the ISFSI. Based on an acceptable review of the SAR, the NRC would issue a 10 CFR Part 72 specific license to allow the storage of GTCC waste. Current 10 CFR Part 72 specific license holders would be required to submit an amendment to their existing 10 CFR Part 72 license providing the required additional information, if they desire to store GTCC waste at their ISFSI. The information included in the applications, reports and records is reviewed by the NRC staff to ensure the provision of an adequate level of protection of public health and safety, common defense and security, and the environment.

## 3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. Certain reports, such as transaction reports and inventory reports, are produced by some licensees using automated information technology. Licensees are encouraged to use automated information technology whenever it will reduce the burden on them. However, because of the types of information and the infrequency of submission, the applications and other reports may not lend themselves readily to the use of automated information technology for submission.

#### 4. Effort to Identify Duplication and Use Similar Information

The Information Requirements Control Automated System (IRCAS) was searched to identify any duplication of requested information. None was found.

Section 72.18 specifically provides an opportunity for the applicant to avoid repetition in filing licensing submittals. The applicant may incorporate, by reference, information contained in previous applications, statements, or reports filed with the Commission, provided that such references are clear and specific.

#### 5. Effort to Reduce Small Business Burden

The NRC has determined that the affected entities are not small entities or businesses as those terms are used in the Regulatory Flexibility Act.

#### 6. Consequences to Federal Programs or Policy Activities if the Collection is Not Conducted or is Conducted Less Frequently

Applications are only required to be submitted for the initial license, for amendments, and for renewal every 20 years (40 years for an MRS). The application process requires that applicants and licensees perform comprehensive safety and environmental reviews to assure that all activities will be or are being conducted safely and in accordance with NRC regulations. The review and submission of the information required for the application is essential to NRC's determination of whether the applicant has training, experience, equipment, facilities and procedures adequate to protect the public health and safety. Other reporting and recordkeeping requirements are occasioned by specific events such as tests and experiments, annual environmental reporting, and transfers and inventories of licensed material. Conduct of these tests and other events and collection of information concerning them at the required frequency is essential to the assurance of protection of the health and safety of workers and the public.

#### 7. Circumstances Which Justify Variation from OMB Guidelines

In the "Clearance Extension" for 10 CFR Part 72, the NRC identified a number of sections and paragraphs that are contrary to OMB Guidelines and the corresponding reasons. Nothing in this proposed action changes the existing variations and there are no additional variations based on this proposed action. Those paragraphs that this proposed rule would modify are repeated below.

Section 72.72(a) requires that the licensee keep records for as long as the material is stored and for five years after it is transferred or disposed of. The records must show the receipt, inventory (including location), disposal, acquisition, and transfer of all spent fuel and high-level radioactive waste in storage. The records must include as a minimum the shipper of the material to the ISFSI or MRS, the quantity of material per item, item identification and seal number, storage location, onsite movements of each storage canister, and ultimate disposal. Section 72.72(b) requires that each licensee retain a copy of the current annual physical inventory of spent fuel in storage as a record until the Commission terminates the license.

The records required by Section 72.72 must be retained for more than three years because they are used by the licensee to carry out its material control and accounting operations and are

reviewed by NRC inspectors to ensure the adequacy of the licensee's programs and compliance with NRC regulations. The records are reviewed by the inspection staff to detect diversion of material and to initiate prompt action in the event of a diversion.

Contrary to the OMB Guidelines in 5 CFR 1320.6(b), Section 72.75(b) requires that the licensee notify NRC as soon as possible but not later than 4 hours after the discovery of any of the following events or conditions involving spent fuel or high-level radioactive waste: (1) an event that prevents immediate actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits, or releases of radioactive materials that could exceed regulatory limits (events may include fires, explosions, toxic gas releases, etc.); (2) a defect in any spent fuel storage structure, system, or component which is important to safety; (3) a significant reduction in the effectiveness of any spent fuel storage confinement system during use; (4) an action taken in an emergency that departs from a license condition or a technical specification contained in a license issued under this part when the action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent. (5) an event that requires unplanned medical treatment at a medical facility of an individual with radioactive contamination on the individual's clothing or body which could cause further radioactive contamination; (6) an unplanned fire or explosion damaging any spent fuel or HLW, or any device, container, or equipment containing spent fuel or HLW when the damage affects the integrity of the material or its container. This prompt notification is necessary to permit NRC to determine whether immediate response or corrective action is needed to protect public health and safety.

Contrary to the OMB Guidelines in 5 CFR 1320.6(b), Section 72.75(c) requires that the licensee notify NRC within 24 hours after the discovery of an event involving unplanned contamination or safety equipment failures. This prompt notification is necessary to permit NRC to determine whether immediate response or corrective action is needed to protect public health and safety.

Section 72.75(d)(1) requires that licensee make the reports required by Sections 72.75(a), (b), and (c) by telephone to the NRC Operations Center. The information must include the caller's identity and phone number, as well as a description of the event, date and time, exact location, information about the quantities and chemical forms involved, and any personnel radiation exposure data.

## 8. Consultations Outside the NRC

This rulemaking is in response to a petition submitted by Portland General Electric Company (PRM-72-2) on November 2, 1995. The notice of receipt of the petition for rulemaking invited interested persons to submit written comments concerning the petition (61 FR 3619, dated February 1, 1996). The NRC received six comment letters. Five comment letters were received from nuclear facilities and one from the Nuclear Energy Institute (NEI). NEI provided another letter on this subject directly to the NRC Chairman on February, 1999, and the NRC responded on March 25, 1999. The comments were reviewed and considered in the development of NRC's decision on this petition.

As the next step in the rulemaking process, the NRC developed a draft Rulemaking Plan which was provided to the Agreement States for their comment on April 18, 1997. Four Agreement States provided comments.

Opportunity for public comment on this proposed rule has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

None.

11. Justification for Sensitive Questions

No sensitive information is requested under this proposed regulation.



## 12. Estimated Burden and Burden Hour Cost

<u>Reporting Requirements</u>				
<u>Section</u>	<u>Number of Licensee Responses Annually</u>	<u>Licensee Staff Hours Per Submittal</u>	<u>Total Annual Licensee Burden (Hrs)</u>	
72.16	1	115	115	
72.22(e)(3)	<div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	- Included in 72.16		
72.24(i) and (r)				
72.28(d)				
72.30(a)				
72.44(b)(4)				
72.44(d)				
72.52(c)		- Included in 72.56		
72.56	1	120	120	(No additional burden based on this proposal)
72.75(a)	0.01	1	0.01	(No additional burden based on this proposal)
72.75(b)	0.1	2	0.2	(No additional burden based on this proposal)
72.75(c)	0.2	1	0.2	(No additional burden based on this proposal)
72.75(d)(1)		- Included in 72.75(a), (b), and (c)		
72.75(d)(2)(iv)(L)	1	1	1	(No additional burden based on this proposal)
72.76(a)		- See OMB Clearance No. 3150-0004		
72.78(a)		- See OMB Clearance No. 3150-0003		
72.80(g)	1	5	5	(No additional burden based on this proposal)
72.108	<div> <div></div> <div></div> <div></div> </div>	-Included in 72.16 or 72.56		
72.120(a)				
72.140(c)(2)				
<b>Total Reporting Hours from this request</b>	<b>1</b>	<b>115</b>	<b>115</b>	
Total Reporting Cost - \$16,445 (115 hours x \$143/hour)				

Cost to applicants and licensees is calculated at a rate of \$143 per hour.

Recordkeeping Requirements

	<u>Number of Recordkeepers</u>	<u>Total Annual Hrs per Recordkeeper</u>	<u>Recordkeeping Hours</u>	<u>Retention Period</u>
72.72(a)	1	2	2	5 yrs after transfer
72.72(b)	1	3	3	Duration of License
72.72(d)		- Included in 72.72(b) above		5 yrs after transfer
Total Recordkeepers: 1				
<b>Total Recordkeeping Hours from this request</b>		<b>5</b>	Total Recordkeeping Cost \$715 (5 hours x \$143/hour)	
<b>TOTAL LICENSEE BURDEN HOURS FROM THIS REQUEST</b>		<b>120</b>	<b>TOTAL LICENSEE COST: \$17,160 (\$16,445 + 715)</b>	

Cost to applicants and licensees is calculated at a rate of \$143 per hour.

13. Estimate of Other Additional Costs

None

14. Estimated Annualized Cost to the Federal Government

Annual Cost - NRC Staff Review = \$14,300  
(Staff effort - 100 hours @ \$143/hr)

This staff effort is needed to review license or amendment applications as discussed in Item number 2.

This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and 171.

15. Reason for Changes in Burden or Cost

There is a small increase in burden and cost associated with allowing licensees to store reactor-related GTCC waste under the provisions of 10 CFR Part 72. This additional burden is insignificant relative to the current 10 CFR Part 72 estimate of 24,458 hours.

16. Publication for Statistical Use

None.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations to display information that, in an annual publication, could become obsolete would be unduly burdensome to keep current.

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Statistical methods are not used in this collection of information.